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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/583,229	05/30/2000	Blaine D. Johs		9390

7590  
James D Welch  
10328 Pinehurst Ave  
Omaha, NE 68124

05/23/2003

EXAMINER

SMITH, ZANDRA V

ART UNIT	PAPER NUMBER
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2877

DATE MAILED: 05/23/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

09/583 229

Applicant(s)

JOHS ET AL

Examiner

Zandra V. Smith

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☐ Claim(s) 1-46 is/are pending in the application.
- 4a) Of the above claim(s) 16-46 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-15 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

### Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☒ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 4-5.
- 4) ☐ Interview Summary (PTO-413) Paper No(s) \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other \_\_\_\_\_.

## **DETAILED ACTION**

### ***Election/Restrictions***

During a telephone conversation with James Welch on May 1, 2003 a provisional election was made without traverse to prosecute the invention of Group 1, a lens system for use in an ellipsometer, claim 1-15. Affirmation of this election must be made by applicant in replying to this Office action. Claims 16-46 are withdrawn from further consideration by the examiner, 37 CFR 1.142(b), as being drawn to a non-elected invention.

### ***Claim Objections***

Claim 7 is objected to under 37 CFR 1.75(c) as being in improper form because a multiple dependent claim may not depend from another multiple dependent claim. See MPEP § 608.01(n). Accordingly, the claim 7 not been further treated on the merits.

Claim 12 is objected to because of the following informalities: multiple instances of periods in the claim. Appropriate correction is required.

### ***Claim Rejections - 35 USC § 112***

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 12-15 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 12 includes a Markush group with limitations in parenthesis and optional elements. The components of a Markush group should be definitely and fully stated as a group of distinct members. Additionally, the magnitude of possible combinations makes determination of scope

of the claim impossible. Appropriate correction is requested. Claims 13-15 are included for their dependence on claim 12.

***Claim Rejections - 35 USC § 102***

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States

Claims 1-2, 4-5, 8-10, and 14-15 are rejected under 35 U.S.C. 102(b) as being anticipated by *Oda (4,854,686)*.

As to **claims 1, 4, and 8**, Oda discloses an apochromat type object lens, comprising two sequentially oriented lens elements (3, 6) in a lens system, one element to converge electromagnetic radiation and the other to diverge electromagnetic radiation, there being a region between the two elements to produce a focused beam of electromagnetic radiation (col. 2, lines 38-52), the two elements being made of two different materials such that the wavelengths pass through the same for each wavelength (col. 1, lines 10-20), the lens element including a sequential combination of a converging element, a diverging element, a diverging element and a converging element (see fig. 2).

As to **claim 2 and 5**, Oda discloses everything claimed, as applied above, in addition a biconvex lens is provided to converge and a plano-concave is provided to diverge and the lens system includes (d) (see fig 2)

As to **claim 9**, Oda discloses everything claimed, as applied above, in addition the lenses do not demonstrate birefringence.

As to **claim 10**, Oda discloses everything claimed, as applied above, in addition the lens element includes a sequential combination of a converging element, a diverging element, a diverging element and a converging element (see fig. 2) and a functional equivalent to a void.

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As to **claims 14-15**, Oda discloses everything claimed, as applied above, in addition the converging element is composed of a positive and the diverging element is composed of a negative meniscus (see fig. 2)

Claim 12 is rejected under 35 U.S.C. 102(b) as being anticipated by *Norton (5,917,594)*.

As to **claim 12**, Norton discloses a spectroscopic measuring system, comprising a light source (12) and a polarizer (18), input lenses (22 and 24) and beam directing optics (30) (see fig. 1). In addition the input lens is an achromatic lens (col. 3, line 54) of multi-element construction, neither lens demonstrating birefringence (col. 7, lines 33-36)

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

**Claims 3, 6, and 11 are rejected under 35 U.S.C. 103(a) as being unpatentable over *Oda (4,854,686)*.**

As to **claims 3, 6, and 11**, Oda discloses everything claimed, as applied above, in addition composing the lens system of different elements is provided (col. 1, lines 10-15) and a biconvex lens is provided to converge and a plano-concave is provided to diverge and the lens system includes (d) (see fig. 2). Oda differs in that the particular material that the lenses are composed of is not disclosed, however it would have been obvious to one having ordinary skill in the art at the

time of invention to compose the lenses of any material claimed since the material composition of the lens will determine which wavelengths are transmitted.

Claims 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over *Norton (5,917,594)* in view of *Hastings (415,040)*.

As to **claim 13**, Norton discloses everything claimed, as applied above, in addition the lens system is composed of a positive and negative lens, both composed of calcium fluoride (col. 7 lines 34-36). Norton differs in that the shape of the lenses is not provided, however providing an achromatic lens system of bi-convex and bi-concave elements is well known as taught by Hastings. Hastings discloses an achromatic telescope objective (col. 2, lines 15-20) composed of a bi-convex and bi-concave element (see fig. 1). It would have been obvious to one having ordinary skill in the art at the time of invention to compose the lens system of bi-convex and bi-concave elements to properly focus the individual wavelengths.

### *Conclusion*

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

*Kohler (2,785,602)* discloses a three lens apochromatic objective

*Thielens (2,865,253)* discloses an infrared achromatic lens.

*Kruger (3,622,218)* discloses a two-element objective for use in the infrared range

*Rollins (5,202,792)* discloses a system of objectives with optical athermalization.

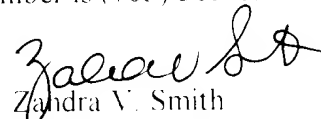
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***Fax/Telephone Information***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Zandra V. Smith whose telephone number is (703) 305-7776. The examiner can normally be reached on 8:00 a.m. - 4:30 p.m.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Frank G. Font can be reached on (703)308-4881. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 308-7722 for regular communications and (703) 308-7722 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-0530.

  
Zandra V. Smith  
Primary Examiner  
Art Unit 2877

May 16, 2003